NEIGHBORHOOD TRAFFIC CALMING PROGRAM OVERRIDING POLICIES DOCUMENT

EXECUTIVE SUMMARY

Neighborhood traffic problems continue to grow within the City of Issaquah. The Public Works Engineering Department and the Police Department have been dealing with a steadily increasing number of requests regarding traffic safety concerns in residential areas. A program that has gained increased popularity in the Traffic Engineering field is the establishment of objectives and criteria for a Neighborhood Traffic Calming Program. Establishing program objectives and criteria for a Neighborhood Traffic Calming Program that are consistent with the Comprehensive Plan's Transportation Element will provide a variety of potential alternatives with which to creatively solve problems in partnership with the neighborhoods and the City Council.

3.1 Transportation Vision. Issaquah envisions managing local travel demand and improving local access while sustaining neighborhoods; supporting the local business community; providing effective delivery of commercial, public, and emergency services; and encouraging the use of transit and non-motorized travel modes. (1)

This program establishes the neighborhood traffic calming program objectives and criteria where needed in order to sustain residential neighborhoods. This program is designed to retain the positive attributes and quality of life associated with livable neighborhoods. With increased development and traffic congestion, there is an increased tendency for traffic to cut through residential and neighborhood areas causing a decrease in the positive attributes and quality of life. Typically this occurs when traffic tries to avoid the appropriate but congested arterials and travels through various residential areas in order to avoid the congestion. In addition, this cut through traffic typically travels at higher speeds than is acceptable within a residential neighborhood and therefore requires creative solutions to either divert the cut through traffic or reduce the speeds at which they are traveling.

The specific program objectives established with this program will provide staff, with the direction from the City Council, to successfully bring the City's Vision to fruition with the use of various traffic control techniques and methods. It will also provide the framework in which the City Council will have as a tool to respond to various Citizen concerns with traffic safety, volumes and vehicle speeds on the City's residential roadways. It will provide a method of giving residential streets the residential character planned for in years past and prior to the challenges of traffic growth in the Puget Sound Region on the City of Issaquah.

The continued increase in regional and local traffic volumes in the City of Issaquah have increased residents' concerns regarding safety and quality of life. Neighbors want to promote safe and pleasant conditions for motorists, bicyclists, pedestrians, and residents along neighborhood streets. In response to these issues, the Public Works Engineering Department together with the Police Department, has created a Neighborhood Traffic Calming Program.

(1) 2002 City of Issaquah Comprehensive Plan



Adopted: April 21, 2003 Overriding Policies Document "Traffic Calming is the combination of mainly physical measures that reduce the negative effects of motor vehicles, alter driver behavior and improve conditions for non-motorized street users". Adopted by ITE International, 1997

The physical traffic measures referred to in the above definition include a combination of vertical and horizontal deflections in the road as well as obstructions and traffic regulations. Examples of these physical traffic measures include speed humps, traffic circles, curb extensions and diverters (see attached Neighborhood Traffic Calming Device Implementation Criteria, Table 1). These physical traffic measures - used alone or in various combinations and implemented properly - can be effective in reducing motor vehicle speeds, reducing traffic volume, and reducing conflicts between those with destinations to the neighborhood and those using neighborhood streets as cut through and thereby improving the immediate environment. The installation of traffic calming devices is subject to the approval of the City Council.

The Transportation Element of the 2002 Comprehensive Plan includes significant policies consistent with the need for a Neighborhood Traffic Calming Program. Below is the definition of the City's street classification system. This hierarchy of road system is important for determining where the traffic needs to be located and where it will travel.

- **5.1 Street System**. Issaquah's road system includes arterial, collector and local streets that provide the principal mode of transportation for the community.
- **5.1.1** Principal Arterials provide for traffic movements into, out of, and through the City (e.g. Front St.). Principal arterials carry the highest traffic volumes, serve the longest trips and emphasize traffic movement for convenient access to adjacent land uses.
- **5.1.2** <u>Minor Arterials</u> serve intra-city as well as some through-trips (e.g. Sunset Way). Minor arterials provide more access to abutting land uses than principal arterials do and serve local and intracommunity bus routes.
- **5.1.3** <u>Collector Streets</u> provide movement within neighborhoods and direct neighborhood trips onto the principal and minor arterial street system (e.g. Dogwood St). Typically, collectors carry moderate traffic volumes, relatively shorter trips than arterials and little through-traffic.
- **5.1.4** <u>Local Access Streets</u> comprise all roadways and streets not otherwise classified. The primary function of local streets is the provision of access to abutting properties.

OVERRIDING POLICIES – 2002

Comprehensive Plan: Transportation Element

14. Transportation Goals and Policies

GOAL: To provide a variety of motorized and pedestrian transportation systems that facilitate the safe and efficient access and mobility of traffic and people.



T-1: Land Use

- **Policy T-1.1 Residential Character:** Preserve the character of residential neighborhoods by establishing maximum allowable traffic volumes on residential streets that are substantially lower than traditional engineering methods would indicate in order to provide safe local access.
- **Policy T-1.5** Existing Street System: Complete missing links, sidewalks, and other enhancements in the existing street system to provide more effective utilization of existing roads.
- **Policy T-2.1 Street Standards:** Design and construction standards for transportation facilities shall result in facilities that meet the needs of neighborhoods, commercial areas, community places and access to regional facilities based upon minimum standards in AASHTO, A Policy on Geometric Design 1984.
- **Policy CF 1.6 Prioritizing of Capital Improvements:** All projects in the Capital Improvement Plan shall be consistent with the Land Use vision, "Municipal operations will be dedicated to enhancing the community's water and air quality, protection of critical areas and water resources, and provision of efficient public services to maximize public safety."

PROGRAM OBJECTIVES: Consider the following Neighborhood Traffic Calming program objectives when seeking area consensus regarding ways to influence the volume and speed of traffic. The Neighborhood Traffic Calming program objectives to be considered include:

- 1) Slower speeds for motor vehicles to create safer streets,
- 2) Reduction of collision frequency and severity to create safer streets,
- 3) Increased safety and the perception of safety for non-motorized users of the street(s),
- 4) Preferences and requirements of the people using the area (e.g., working, playing, residing) along the street(s), or at intersection(s);
- 5) Reduction in the need for police enforcement,
- 6) Enhanced street environment (e.g., street scaping) to create more attractive streets, including the negative effects of motor vehicles on the environment (e.g. pollution and sprawl); and
- 7) Increased access for all modes of transportation to promote pedestrian, cycle and transit use.



IMPLEMENTING STRATEGIES, CRITERIA AND SOLUTIONS

Implementation A. Apply traffic control devices such as the expansion of the computerized synchronization of traffic signals, proper spacing of new signals, control of access to arterial streets through driveway regulations, and posting of realistic speed limits on arterial streets to encourage the use of arterial streets.

Implementation B. Design new residential local and collector street networks to discourage unnecessary non-local traffic through the use of loop streets, cul-de-sacs, T-type intersections and discontinuous alignments, etc. while providing adequate access for residents, visitors, emergency and service vehicles.

Implementation C. Provide technical assistance to neighborhoods through the Neighborhood Traffic Calming Program to define the nature of traffic problems and develop solutions which can be implemented technically and financially. Solutions are in the form of Phase 1 and Phase 2 options.

Implementation D. Provide emphasis on the safe and efficient movement of people, both pedestrians and vehicles, along principal arterial streets with improvements to be made to facilitate travel where needed and feasible.

Implementation E. Ensure efficient travel movement along minor arterial streets for access to abutting property and compatibility with neighborhoods when considering changes in street cross sections and operations.

Implementation F. Place emphasis on service and compatibility of neighborhood streets within the immediate area.

Implementation G. Orient access to collector and local streets when providing access to and from parcels of land, especially those containing controlled-access facilities, rather than from the arterial street network. Design access points so that traffic from higher density uses does not pass through lower density areas to connect to the arterial street network.

Implementation H. Use directional signage to reinforce the use of the arterial street system, especially principal arterials, and emphasize preferred access routes to the major corridors.

Implementation I. Use Education, Enforcement and Engineering to solve neighborhood traffic problems. For example, use Speed Trailers to educate drivers and residents along residential roadways to address speed concerns in residential neighborhoods.

Implementation J. Maintain the continuity of the arterial street network by controlling the volume and/or speed of traffic through residential neighborhoods, and retain reasonable access between neighborhoods and the arterial street network.



STRATEGIES

Strategy 1) Establish a neighborhood Traffic Calming Program in conjunction with the Citizen Action Request form, which will give residents of neighborhoods with traffic concerns a chance to provide input toward the solution of those problems. The program would identify a variety of traffic concerns in residential neighborhoods ranging from speeding motorists and shortcutting traffic commuters to pedestrian safety education. It would draw upon the neighborhood in the problem identification, planning, design, implementation, and evaluation phases of the program thereby encouraging public participation.

Strategy 2) Develop a brochure in conjunction with the Citizen Action Request, which will allow the community a simplified process of addressing traffic concerns through **Education**, **Enforcement and Engineering**. In addition, the brochure will describe the Neighborhood Traffic Calming Program. The brochure will describe techniques the City can use to address traffic issues and educate residents to be more aware of their driving habits. Guidelines of the program, a questionnaire and an application to participate will be included in the brochure. The questionnaire provides a method for the residents to explain the problems they perceive and recommend solutions that staff can review and analyze. This program will allow Traffic Engineering staff to learn of the residents' perception of traffic problems, concerns, and needs.

Strategy 3) Continue with the Radar Speed Trailer Program by deploying the devices in residential areas where speeding continues to be observed. A Radar Speed Trailer shows the speed a vehicle is traveling on a large board attached to the trailer. As the vehicle approaches the trailer, the driver sees his/her speed displayed in large illuminated numbers. If he/she is speeding, the numbers flash in red. Above the illuminated number is a typical speed limit sign for the particular street. This device serves the purpose of an educational tool as it allows the residents to observe the actual speeds at which vehicles are traveling along their neighborhood street and it makes the driver of the vehicle more aware of his speed so he/she will adjust their speed in accordance with the speed limit.

PROPOSED SOLUTIONS

The Neighborhood Traffic Calming Program defines a number of different traffic improvements that may be used to solve certain problems encountered in Issaquah's residential neighborhoods.

The program is divided into two phases.

PHASE 1:

Upon receiving the returned brochure questionnaire and applications from concerned residents given to them at the time of the initial Citizen Action Request submittal, the Public Works Engineering Department will address neighborhood traffic concerns by evaluating engineering alternatives such as installation of striping, signs and pavement markings. Traffic counts would be taken at that time to determine the current traffic volume on the street in question. Once a solution to the problem is determined, measures will be implemented by the Engineering Department to resolve the traffic concerns.

Residents would receive informational brochures and a Citizen Action Request Form including a questionnaire designed to answer specific questions relating to their traffic concern. The residents desiring to participate in the program would fill out the Citizen Action Request Form and questionnaire



explaining the specific traffic problem occurring in the neighborhood and return the form to the Engineering Department. Solutions may include such remedies as revised pavement markings, sight-distance improvements, and changes to signage.

After staff receives the Citizen Action Request Form and questionnaire, a traffic analysis and field review would be performed by the Public Works Engineering Department. Phase 1 recommendations would then be presented to the residents. Three significant elements: Education, Enforcement and Engineering -- using brochures, questionnaires and field meetings, would be incorporated into Phase 1.

Education would emphasize to residents important traffic safety issues and give instructions for driving safely in accordance with the rules of the road. Two levels of educational programs are recommended as follows:

Neighborhood Education Brochure and Citizen Action Request Form

Provides information describing techniques the City can use to help address traffic issues and educate the residents to be more aware of driving habits. The Citizen Action Request Form provides a method for the residents to explain perceived problems and recommend solutions that staff can review, analyze, and implement.

If implementation of the more conventional solutions(s) such as installation of striping, signs and pavement markings to solve the neighborhood concerns were not successful, the Neighborhood Speed Watch Program would be implemented.

Neighborhood Speed Watch Program

Provides the availability of a Radar Speed Trailer for use by the Police Department for deployment in the neighborhood. The Radar Speed Trailer can be locked in place for a period of time and operate unattended. The residents are trained in the operation of the radar unit and reader board. By having trained individuals monitor the vehicle speeds in the neighborhood, they will have first hand experience of vehicle speed. The volunteers will have an opportunity to determine if actual traffic speeds are as high as they had believed them to be.

If vehicles are speeding, the volunteer(s) will record the vehicle information and provide it to staff. The City staff would then send a letter notifying the registered owner that speeding had been observed and explain the neighborhood's desire for safe roadways and request the speed limit be observed.

The advantage of using the Radar Speed Trailer along with the neighborhood volunteer program is that the volunteer will report actual (measured) speed of vehicles.

Phase 1 would be evaluated after up to 6 months of operation. If the measures prove ineffective after 6 months, then Phase 2 would be implemented for further consideration of traffic calming devices.



PHASE 2:

A traffic calming device analysis would be completed by the Public Works Engineering staff. It would be determined through the use of the Neighborhood Traffic Calming Device Implementation Criteria (Table 1) and the Neighborhood Traffic Calming Program Physical Treatment Locations map (Figure 1) as to which traffic calming device, if any, qualifies for the neighborhood.

The criteria for installation of traffic calming devices, which require a neighborhood mailing survey, would be followed. If the percent (the per cent is listed in the Neighborhood Traffic Calming Device Implementation Criteria) of the residents fronting the street are in favor of certain devices, and the street meets the requirements as outlined in the criteria, traffic calming devices would be installed after City Council approval.

One year after installation of the traffic calming devices, a second evaluation would be completed to determine the effectiveness of the devices. The neighborhood would be provided with a questionnaire to determine if the devices resolved the traffic concerns. Speed surveys would be taken during the first year after installation to compare the "before and after" results of the devices.

NEIGHBORHOOD TRAFFIC CALMING PROGRAM EXPECTED RESULTS

By providing the program in two phases over a 18-month period, staff would have the opportunity to work with the neighborhood on a less restrictive basis to address the traffic concerns. This approach permits the neighborhood to be involved in solving traffic concerns.

The success of this program will also reduce the number of installations of physical devices on the street. The cities of Bellevue and Redmond are using this neighborhood program and have found it to be extremely successful.

The City of Issaquah is extremely concerned with the neighborhood traffic problems. This program is within the policy direction adopted in the Comprehensive Plan and provides a method, which shows that the City cares and responds to the neighborhood's needs. This program will provide a mechanism for the residents to solve a traffic problem in their neighborhood. The Neighborhood Traffic Calming program allows the residents to validate concerns and improve driver behavior in their area. It minimizes the number of physical devices installed on local streets while providing effective traffic calming alternatives.

Each neighborhood has unique characteristics requiring an individualized approach to solving its traffic concerns. The City is committed to doing whatever is necessary to improve traffic safety on public streets and working cooperatively with residents to that end.



APPENDIX A: Comprehensive Plan Consistency of Implementation Programs A-J

2002 Comprehensive Plan Transportation Element

14. Transportation Goals and Policies

GOAL: To provide a variety of motorized and pedestrian transportation systems that facilitate the safe and efficient access and mobility of traffic and people.

T-1: Land Use

- **Policy T-1.1** Residential Character: Preserve the character of residential neighborhoods by establishing maximum allowable traffic volumes on residential streets that are substantially lower than traditional engineering methods would indicate in order to provide safe local access.
 - **Implementation B.** Design new residential local and collector street networks to discourage unnecessary non-local traffic through the use of loop streets, cul-de-sacs, T-type intersections and discontinuous alignments, etc. while providing adequate access for residents, visitors, emergency and service vehicles.
 - **Implementation C.** Provide technical assistance to neighborhoods through the Neighborhood Traffic Calming Program to define the nature of traffic problems and develop solutions which can be implemented technically and financially. Solutions are in the form of Phase 1 and Phase 2 options.
 - **Implementation F.** Place emphasis on service and compatibility of neighborhood streets within the immediate area.
 - **Implementation I.** Use Education, Enforcement and Engineering to solve neighborhood traffic problems. For example, use Speed Trailers to educate drivers and residents along residential roadways to address speed concerns in residential neighborhoods.
- **Policy T-1.5** Existing Street System: Complete missing links, sidewalks, and other enhancements in the existing street system to provide more effective utilization of existing roads.
 - **Implementation E.** Ensure efficient travel movement along minor arterial streets for access to abutting property and compatibility with neighborhoods when considering changes in street cross sections and operations.
 - **Implementation H.** Use directional signage to reinforce the use of the arterial street system, especially principal arterials, and emphasize preferred access routes to the major corridors.
- **Policy T-2.1 Street Standards:** Design and construction standards for transportation facilities shall result in facilities that meet the needs of neighborhoods, commercial areas, community places and access to regional facilities based upon minimum standards in AASHTO, A Policy on Geometric Design 1984.
 - **Implementation A.** Apply traffic control devices such as the expansion of the computerized synchronization of traffic signals, proper spacing of new signals, control of access to arterial streets through driveway regulations, and posting of realistic speed limits on arterial streets to encourage the use of arterial streets.



- ADOPTED: APRIL 21, 2003
- **Implementation B.** Design new residential local and collector street networks to discourage unnecessary non-local traffic through the use of loop streets, cul-de-sacs, T-type intersections and discontinuous alignments, etc. while providing adequate access for residents, visitors, emergency and service vehicles.
- **Implementation D.** Provide emphasis on the safe and efficient movement of people, both pedestrians and vehicles, along principal arterial streets with improvements to be made to facilitate travel where needed and feasible.
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- **Implementation F.** Place emphasis on service and compatibility of neighborhood streets within the immediate area.
- **Implementation G.** Orient access to collector and local streets when providing access to and from parcels of land, especially those containing controlled-access facilities, rather than from the arterial street network. Design access points so that traffic from higher density uses does not pass through lower density areas to connect to the arterial street network.
- **Implementation H.** Use directional signage to reinforce the use of the arterial street system, especially principal arterials, and emphasize preferred access routes to the major corridors.
- **Implementation J.** Maintain the continuity of the arterial street network by controlling the volume and/or speed of traffic through residential neighborhoods, and retain reasonable access

Policy CF 1.6 Prioritizing of Capital Improvements: All projects in the Capital Improvement Plan shall be consistent with the Land Use vision, "Municipal operations will be dedicated to enhancing the community's water and air quality, protection of critical areas and water resources, and provision of efficient public services to maximize public safety."

- **Implementation A.** Apply traffic control devices such as the expansion of the computerized synchronization of traffic signals, proper spacing of new signals, control of access to arterial streets through driveway regulations, and posting of realistic speed limits on arterial streets to encourage the use of arterial streets.
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- **Implementation H.** Use directional signage to reinforce the use of the arterial street system, especially principal arterials, and emphasize preferred access routes to the major corridors.



NEIGHBORHOOD TRAFFIC CALMING DEVICES IMPLEMENTATION CRITERIA Table 1



Tuesday and Time	Minimovino Comercialità	Tueffie Values	Crand
Treatment Type	Minimum Community Support Needed	Traffic Volume (ADT, Ave. Daily Traffic)	Speed (85 th percentile)
Speed Humps	70% of households on street to receive speed humps or greater than 80% of households on cul-de-sacs or neighborhoods whose only access to their homes is via the street(s) being considered for the speed humps	300-2000	10 mph over posted speed limit within residential areas 10 mph over posted school zone speed limit 8 mph over posted speed limit for areas adjacent to parks, including neighborhood parks
Traffic Circles	60% of households within designated area of impact*	300-2000	10 mph over posted speed limit within residential areas 10 mph over posted school zone speed limit 8 mph over posted speed limit for areas adjacent to parks, including neighborhood parks
Chicanes	60% of households within designated area of impact*	300-2000	10 mph over posted speed limit within residential areas 10 mph over posted school zone speed limit 8 mph over posted speed limit for areas adjacent to parks, including neighborhood parks

10 Adopted: April 21, 2003

NEIGHBORHOOD TRAFFIC CALMING DEVICES IMPLEMENTATION CRITERIA Table 1



		1	nument of Public Works/Elighteeting
Slow Points Chokers	60% of households within designated area of impact*	300-2000	10 mph over posted speed limit within residential areas 10 mph over posted school zone speed limit 8 mph over posted speed limit for areas adjacent to parks, including neighborhood parks
Curb Extensions	60% of households within designated area of impact*	300-6500	5 mph over posted speed limit
Medians	60% of households within designated area of impact*	300-6500	5 mph over posted speed limit
Entry Treatments Gateways	60% of households within designated area of impact*	300-6500	5 mph over posted speed limit

11 Adopted: April 21, 2003

NEIGHBORHOOD TRAFFIC CALMING DEVICES IMPLEMENTATION CRITERIA Table 1



Closures (Full, Partial)	70% of households within designated area of	<2000 and	N/A
Diverters	impact*	with greater than 30%	
Turn/Access Restrictions		of the traffic in any given	
		hour during the day	
		using the street as a through street	

^{*} Area of impact for measure to be determined on a case-by-case basis.

Note: Only streets classified as Local Access Street per the City's Functional Classification Map and posted 25 mph or lower and only those shown on the Neighborhood Traffic Calming Program Physical Locations map (Figure 1) are considered for the Neighborhood Traffic Calming Program.

12 Adopted: April 21, 2003



LEGEND

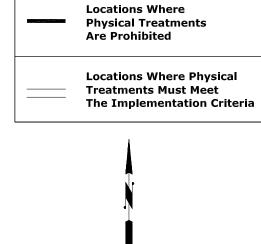


FIGURE 1

ISSAQUAH

Department of Public Works

OF

CITY

NEIGHBORHOOD TRAFFIC CALMING PROGRAM

PHYSICAL TREATMENT LOCATIONS

Adopted: April 21, 2003

Note: Pre-existing traffic calming devices are hereby grandfathered and deemed acceptable for those locations shown on this map as prohibited.